

ABSTRACT

An image sensor and method of manufacture therefor includes a substrate having pixel control circuitry. Dielectric layers on the substrate include interconnects in contact with the pixel control circuitry and with pixel electrodes. An intrinsic layer is over the pixel electrodes and has a gap provided between the pixel electrodes. An intrinsic-layer covering
5 layer is over the intrinsic layer and a transparent contact layer over the intrinsic-layer covering and the interconnects. The intrinsic, intrinsic-layer covering, and transparent contact layer interact in different combinations to provide a pixel isolation system for the image sensor.